



NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

Office of Corporate Communications

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**Remarks as prepared for
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Thanks, Joan [Dempsey, USGIF Board Member], for that kind introduction. And a big thanks to Jeff Harris [USGIF Chairman], Keith Masback [USGIF CEO], and to Aimee [McGranahan, USGIF COO] and the remarkable USGIF team. You’ve done it again. This amazing event gets better every year. Thanks also to all the members, exhibitors, and sponsors here. Quite simply, you make this possible.

I’m also quite pleased we’re in Washington this year, since it offers the opportunity for so many from NGA to attend. Our participation is 500 percent greater than ever before, and we are among a group of over 1600 government attendees. This will result in greater government and industry interaction, which is good for all of us.

This morning, I’m going to briefly take a look back, then check in on the present, but spend most of my time on our future. I’ll introduce our new NGA strategy. And I’ll invite and challenge each of you to join a larger movement.

I’ve been the director for almost nine months now. This job has been extremely gratifying and humbling, and the greatest honor of my professional life.

There’s an old saying: “The Greeks have a word for it.” So many science and technology words originated in ancient Greece. Just look at the all words that start with Geo, which means Earth. Geography means describing the Earth. Geodesy means measuring the Earth.

Geospatial-Intelligence. Well, current DNI [director of national intelligence] and former NGA director [James] Clapper coined that term around the same time as Socrates. I understand they were weight-lifting buddies.

A key Socratic principle is self-awareness – knowing your strengths and your weaknesses. Self-awareness applies individually, as well as to an agency or an enterprise. Our enterprise is comprised of government, industry, academic and international partners – what I call “Team GEOINT.”

So where do we currently stand?

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Before I answer, I need to acknowledge that there is an unchanging nature to our profession. The intelligence profession is a blend of art and science, of left-brain logic and right-brain creativity, of certainty and possibility. It includes developing hypotheses and assumptions, testing them against the facts as we know them, and filling in the gaps between those facts, all on top of the bedrock of location – for example, to safely navigate and precisely target.

Let me give you an example. In August 2013, hundreds of Syrians were killed, and more than a thousand injured by a horrific chemical weapon attack. The Assad regime and its opposition blamed each other. The IC [intelligence community] was able to quickly attribute responsibility with a mix of human, signals, open-source, and most significantly, in my opinion, geospatial intelligence.

GEOINT made the difference. First, it framed all that discordant data. Second, it added exquisite insight and expertise to the many moving pieces on the map.

Nine days after the attacks, the White House released a summary of the IC's analysis that placed the blame squarely on the Assad regime. Two weeks later, the UN released its own conclusions, based on first-hand interviews, and their assessment was consistent with ours. So our intelligence enabled Secretary Kerry to challenge the Syrian government to surrender its chemical stockpile. And one year ago today, the last of those weapons of mass destruction were removed from Syria. That is GEOINT at its finest.

It was also a story of integration across the Intelligence Community, and a fitting reflection of how far we've come in the past ten years. As someone who started as a photographic interpreter at DIA [Defense Intelligence Agency] more than 30 years ago, it's fascinating and rewarding to see where we are today.

So, where are we? Today, we still put the power of GEOINT in the hands of our customers to help enable consequence at their point of decision. And we've expanded our definition of support to those in uniform beyond combat to include deployers and heroes in white lab coats.

For example, we supported the Ebola fight in Liberia. We helped place treatment units and determined travel times and routes ... from places where Ebola breakouts occurred. But in this case, our GEOINT contribution was posted on the worldwide web. No accounts or passwords required, just a browser. It allowed health care workers to quickly isolate those with the virus and shorten times between diagnosis and treatment. And that time saving led to life saving, or what I call consequence.

So, after we reflected upon our Ebola effort, we decided this type of open collaboration needed to become the norm. And two months ago we were put to the test again, when a devastating earthquake struck Nepal.

Within 24 hours, our response team had set up an open worldwide web site, and posted atlases of the major cities in the country. On that baseline, NGA offices and our partners were collaborating: Pacific Command, Transportation Command, the 3rd Marine Expeditionary Force, the State Department, the United Kingdom, and Canada – all collaborating, all sharing unclassified content on the Web.

We posted 240 data layers on top of 46 continuously updated maps. And tens of thousands flocked to the website. We united behind a noble purpose and did exactly what was needed: to help save as many lives as possible, and assist millions to recover from utter devastation.

I'd like to give special mention to DigitalGlobe, a key member of Team GEOINT, who allowed us to post all of their imagery for 30 days. DigitalGlobe also did the right thing.

For decades, intelligence was like a regulated currency. We guarded it jealously. We controlled it tightly.

In a recent article in the *Harvard Business Review*, Jeremy Heimans and Henry Timms referred to this strength as “old power.” They called it “closed, inaccessible, and leader-driven. It downloads, and it captures.”

As a currency, hoarding is good. That's clearly what we did, and still do to a large degree, to great advantage, because old power was and is still useful. But in today's world, our enterprise must operate differently: less like currency, and more like a current.

Heimans and Timms believe “new power” is made by many – and I quote: “It is open, participatory, and peer-driven. It uploads, and it distributes.... The goal with New Power is not to hoard it, but to channel it.” So the best way to increase New Power is by channeling ... and partnering.

Our proud past set us up for an amazing future. However, what got us here, won't get us there.

The ancient Greeks also gave us the word “strategy,” the art of leadership. And today, I'm proud to announce the new NGA strategy.

Our revised mission statement: “To strengthen the Nation through our command of geospatial intelligence.”

Our vision remains “Know the Earth ... Show the Way ... Understand the World.”

We'll deliver context, coherence and consequence, to advantage our partners and customers in an uncertain world.

We have outlined four goals.

The first goal has to do with our people: We will attract, develop and sustain a more diverse, agile, self-aware and expert workforce. We will create a learning organization with a culture of innovation, and do it in an environment that rewards people who take risks, and do their best to collaborate.

Speaking of risk taking, you all know the story of the Gordian knot. It was so intricate, so complicated, that nobody ever came close to untying it. So Alexander the Great drew his sword and sliced it in two, thus solving the problem. You might say that's cheating. I call it out-of-the-box, or maybe out-of-the frame, thinking.

To help our people, we need to do what we can to cut our Gordian knot, and automate as much as possible, so analysts can analyze, instead of spending all their time trying to sort through chaotic data.

Our people serve in a far more integrated IC now, and the GEOINT analyst must be an intelligence officer first. GEOINT analysts must start with the intelligence problem, and work through how and where to acquire the necessary information, to find answers.

We will tell the story and convey the analysis, so it's coherent, and customers can take their action at the point of decision. It will be less about how much content our people can deliver, and more about how quickly we can parse and make sense of it, to deliver context and coherence to our customers by finding meaning behind, beneath, and between the data. Our unique value will be our experience and our analytic expertise, to this remarkable explosion of capability. In other words, brains still matter.

We'll translate our analytic assumptions and adversary hypotheses into models that will unleash the power of our interconnected sensors and databases. That will help us understand not only where to look, but also when to look, and evolve from spatial resolution to temporal resolution to activity resolution.

When our major concern was the Soviet Union – my analytic era – the GEOINT problem was easier and more straightforward, although it certainly didn't seem that way at the time. Old power worked back then, and it's still needed today in many situations.

But with so many asymmetric, agile, non-state actors around the globe, we need to support our talent, and to become equally agile in our thinking and our technology. Our people must anticipate and adapt to persist and cover more ground, and track activity over time and threats across the spectrum.

Activity resolution is our approach to the life cycle of a threat, so our customers can hold it at risk. We'll become much more effective storytellers, seamlessly weaving traditional and nontraditional sources to present visually compelling GEOINT narratives. Our people will be less about analysis of the image, and more about identifying patterns and acquiring insight, across images, and the spectrum, around the clock. We'll build on our object-oriented baseline and become more service-oriented.

Objects, of course, will always be important and necessary. But our value proposition is much more than that. Our expertise will ride on top of the objects, infer insight, and create understanding about the temporal and activity significance of those objects.

One of the most challenging things affecting our people in the near future is the SmallSat revolution. Some are uncomfortable with this seemingly uncontrolled movement of more and more sensors into space. And while I recognize that there are two sides to the world's growing transparency, I am energized and enthused about this development.

Frankly, it has pushed GEOINT to an inflection point. In the next five years, more than a dozen constellations, with hundreds of SmallSats, will launch, and continuously scan the earth. The SmallSat revolution will do just that: revolutionize the way we sense the planet. And I stress "sense," as it's much more than just images. It means our analysis of world events is going to be holistic and persistent.

In fact, the democratization of GEOINT and the "darkening of the skies" is the opportunity of our time for our people. So we in government have to pivot, and change our mindset, to investigate multiple possibilities, and to better understand this complex situation. We won't need to balance a finite collection capability against a seemingly infinite set of GEOINT requirements. And I'm betting on our people – those brains – because their expertise is our ultimate value proposition.

The second goal in our new NGA strategy is to expand Team NGA to Team GEOINT. We will be the partner of choice to advance our craft, and to protect the nation and its allies.

Everyone is familiar with atlas as the term for a collection of maps. The name also comes from the Greeks, as Atlas held the weight of the Earth on his back.

Ever since he's been DNI, our Boss prefaced his annual worldwide threat assessment to Congress with, and I quote: "We're facing the most diverse array of threats I've seen in 50 years in the intelligence business."

It continues to be true. It's a crowded, messy and dangerous world. The key to facing those threats and holding up this burden is not simply to ask DNI Clapper to get stronger, as some kind of modern-day Atlas. Rather, we must build a larger, more all-encompassing team, to distribute the weight of the mission across all our shoulders. We're reaching out to more and more industry and academic partners. We're also integrating our capable international partners.

It's less a formal structure, and more of a movement. It's a "new power" construct, not an old one. So our time is now to fully embrace Team GEOINT.

Who exactly would be on this team? It will include open, online communities of geographers and technologists. International partners. There's a place for big business, and a place for small business and start-ups. Universities and think-tanks. If you're interested, and you have value to contribute, you're on the team.

So, how does Team GEOINT work? It uses skills and its collective power to advance our craft, extend capabilities, and connect the community of practitioners. Through continual, informed and ongoing contributions, and flexible, open data-sharing arrangements. It finds innovations, inventions, and methodologies to benefit the rest of the Team.

How do we add new members to Team GEOINT? They add themselves when they reach out, stand up, and extend their arms, to help hold up the Earth with us, just like Atlas did.

So, why am I so bullish on the Team GEOINT concept? Because the success of our global GEOINT Enterprise, of Team GEOINT, is central to the success of NGA. NGA cannot do it alone. NGA will not do it alone. So we must leverage the collective strength of the team, to not only determine the patterns of "normalcy," but also to develop technical solutions, and to smartly employ all the data that's already at our fingertips.

The community of minds right here in this convention center is staggering. A force to be reckoned with. A new power to be channeled.

We will enable this team through innovative technology upgrades, flexible sharing policies, analytic compatibility, cross-training, content in the open, and international standards.

The threats in 2015 and the threats of the future demand that we accelerate our rate of change, our rate of cooperation, and our rate of integration.

The third goal in our new strategy has to do with our profession – we must advance excellence in our craft.

For those in Industry, you'll be interested to know that one way we want to do that is to build speed and flexibility into our acquisition process. We're breaking down the barriers to inclusion and innovation in the commercial and academic worlds.

We don't have all the answers. In fact, I know I'll get a few good answers this week, when I talk with many of you, as well as questions I hadn't thought of.

One major area of focus is to provide access to our content across all security domains, using web technology, and equally importantly, welcoming the content and services our partners provide. In other words, it's vitally important that we're able to succeed with you in the open. And we need to be able to do so wherever and whenever the moment demands, to be as effective in the unclassified world as we are in the classified one.

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We'll always need our exquisite and specialized classified sources, but we're going to also welcome and embrace new information sources. It is a calculated risk, but it's where we need to go. The world demands it, and our customers deserve it.

DNI Clapper has said – and I quote: “Geospatial intelligence has a great advantage in our current environment, because it is the most transparent of the collection disciplines.” We know we're a public trust, and we value civil liberties and privacy. So let me be clear: NGA will continue to position itself as the IC leader in transparency.

We have momentum in this area. We've recently launched a project called the GEOINT Pathfinder. The project team will consist of a group of data scientists, application developers, open source researchers, methodologists, and analysts. They'll do 90-day sprints to answer intelligence questions with only unclassified data and commercial information technology. The goal is to see if we can deliver high-quality unclassified GEOINT to our customers.

How close are we to succeeding in the open? We did well in West Africa and Nepal, but we need to accelerate our current progress, and make more content as accessible as possible, and find better ways to leverage the contributions of others.

That brings us to the fourth and final goal in our new strategy. It's the sum total of the first three, and it has to do with our value, and who we are. To do that, we need to transition from being customer-focused to being customer-centric. We have to understand them so well that we anticipate their needs, and exceed their expectations.

We already have one example that really exemplifies customer-centricity. Under the open software site GitHub, one of the many apps we've developed and posted is called the Disconnected Interactive Content Explorer, or DICE. After an initial download, it allows users to display maps and interactive data on mobile devices, even when they're not connected anymore to the internet. So it's incredibly useful for first responders and residents where storms or earthquakes have wiped out their network connections.

But while putting GEOINT in the hands of our customers, even unplugged ones, is necessary, it's not sufficient. We also need to embrace our new role as a service provider and data broker as the foundation for providing content, in context. It's going to encourage and enable contributions from everyone in Team GEOINT. We'll be able to provide our customers with a platform for on-demand, all-domain access. We'll be able to exchange geospatial, geo-referencing, enrichment, sensor, and processing services.

We'll have a secure and open IT architecture. It will leverage cloud-based infrastructure at three levels: First, the open internet and the IC Unclassified Cloud. Second, the SIPRNet collateral network. And third, the JWICS cloud, the IC Information Technology Enterprise, or ICITE, which will connect us to each other like never before as an intelligence profession. A quick word about the import of ICITE. It's absolutely fundamental to the future value proposition of the IC. We must successfully deliver on the DNI's vision.

We have an open-first, web-first strategy, so content can be discovered, accessed, and integrated to its highest potential. As just a first tangible step of embracing our role as an enterprise service provider, last week, two legacy portals closed. The DIA Portal and the NGA GeoWhereHouse Portal were shut down. And GEOINT users have been directed to our ArcGIS Portal.

My Deputy, Sue Gordon, will have more to say about this when she speaks tomorrow morning on this stage.

So, that's how I see the future through the lens of our new strategy. Of all the goals in our strategy, I hope the one that resonates the most with you today is partnering with us, in Team GEOINT.

As you look to the future, and your role on Team GEOINT, please think big. Also know that to really achieve our potential, we need to take some risks as partners. But we need you to take risks with us as well, to strive for something big on this joint odyssey.

For those keeping count, that was another Greek reference. On his 10 year odyssey back from the Trojan War, Ulysses faced a number of new threats. His old power, a large military force that was victorious in the Trojan War, was of little use. He needed a new approach to these threats, a new power.

As you take on new risks with us, consider the agility of the adversary and what would deliver the most consequence for our customers, because that's where we intend to spend our dollars. We'll accelerate our role as a provider, to bring GEOINT to the entire community when and where you need it.

Another request: Share our confidence and our commitment that we're all going to succeed in the open. Only by working together do we all have the best shot to anticipate and exceed our customers' needs. We're going to go where the innovation is, and where the mission lives. We're going to get out of our building – nice as our building is – to work side-by-side.

We were the first member of the Intelligence Community to set up a GitHub portal. But it's not just tools. We're also sharing our acquisition policies, opening ourselves up for comments and best practices from everyone.

Last request: We need your help to develop solutions for the future. The greatest accomplishments in this country have always been together. There's a good reason it works that way – because it sets up a “sweet spot” wherever and whenever we intersect with industry's engine of agility, academia's rigorous methodology, government's sense of purpose, and international partners' different perspectives and unique geographic advantages. And now that you've heard our strategy, I want you to think big, about where we can go.

The ancient Greeks are long gone, but they left us with wisdom – knowledge, combined with brilliant insight that comes from many years' of experience. I believe you'll find that the smartest people today not only think hard about the future ... they also maintain a healthy respect for the past. As one example: Ten years before he died, Steve Jobs said: “I would trade all my technology for an afternoon with Socrates.”

Intelligence has evolved over the years, and the notion of teamwork, as a willingness to come together to solve a common problem, has evolved, too. If we're honest with ourselves about what we can achieve, alone or together, we know we're better off together. Because that way, we'll be strong enough to help our customers handle the heaviest burdens they'll ever have to bear. And we'll be flexible enough to help them succeed, even when they're trying something new, out in the open. So thanks to all of you who want to help carry the weight with us, to be part of the movement, as a member of Team GEOINT.

Again, I'm proud to lead NGA. They are a phenomenal workforce, and I know you'll find them to be the best partners you could ever ask for. At NGA, we're proud to stand with you all, shoulder to shoulder, as your teammates.

I'd like to close this morning by letting a few members of Team GEOINT tell you, much better than I ever could, what it means to be part of this exceptional team. It's the last, but not the least, part of our strategy – our ethos.

[VIDEO: “We are Team GEOINT. We serve the nation and its security above ourselves. We work tirelessly to enable our customers' success. We value transparency, consistency, accountability, and integrity. We look back with deep pride, and we look forward with eager anticipation. In the face of adversity and opportunity, we never blink. We are Team GEOINT.”]

They are Team GEOINT. You are Team GEOINT. This is our movement. This is our moment. Please join us as we move onward!

Thank you.

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